CLAIMS

1. A method for downlink power adjustment in a base station (210, 310, 610) comprising at least two similar hardware units: a first unit (231, 316a, 616a) and a second unit (232, 316b, 616b), in a communications network when moving a resource from said first unit to said second unit, the method comprising:
   - configuring said resource,
   - providing a sample of a power level,
   - transferring said power sample from said first unit to said second unit, and
   - controlling the power level on the second unit towards a power value provided as a power level with turned off output power on said second unit.

2. The method of claim 1, wherein said resource is a channel resource.

3. The method of claim 1 or 2, wherein said hardware units are transmitter units.

4. The method according to any of preceding claims, wherein said downlink power adjustment compensates for power drift between different units during handover.

5. The method of claim 4, wherein said compensation is achieved by periodically adjusting the power by a step that is proportional in size to an offset between a used power and a reference power.

6. The method of claim 5, wherein each adjustment is executed as a number of smaller adjustments applied over an adjustment period.

7. The method of claim 5, wherein said downlink power adjustment is performs the adjustments on a Radio Link (RL) basis.

8. The method of claim 7, wherein the adjustments are performed synchronously.

9. The method of claim 7, wherein the power adjustment is superimposed on an inner loop power control adjustment if activated.

10. The method of claim 9, wherein the power adjustment tuning is:

$$\sum P_{bal} = (1-r)(P_{ref} + P_{P-CPICH} - P_{init})$$

wherein the sum is performed over an adjustment period corresponding to a number of frames equal to a value of an *Adjustment Period*, P_{ref} is the value of *DL Reference Power*, $P_{P-CPICH}$ is the power used on a primary Common Pilot Channel, P_{init} is a code power of a last slot of a previous adjustment period and r is given by an *Adjustment Ratio*.

11. The method of claim 1, wherein a power step size of x dB, y power adjustments are performed preferably evenly distributed over an Adjustment Period, where:

$$y = \left(\sum P_{bal} \right) / x \quad .$$

12. The method of claim 1, wherein the sample of power level is obtained from the first unit.

13. The method of claim 1, wherein the sample of power level is preset.

14. The method of claim 1, wherein if the network (RNC) configures power adjustment in a system having several RLs connected to one mobile unit, then configured values of system specific parameters ("Adjustment Period", "Adjustment Ratio", "Max Adjustment Step"; "DL Reference Power") are used to achieve convergence between channel resources when moving of a channel resource is performed.

15. The method of claim 14, wherein a convergence time depends on setting of said parameters, which can be modified by said base station to speed up a convergence time.

16. The method of claim 15, wherein said parameters are reset to original values.

17. The method of claim 1, wherein if the network has not configured power adjustment, said base station itself turns on adjustment, during movement of a resource.

18. The method of claim 17, wherein the power adjustment is turned off after movement of the resource.

19. The method of claim 1, wherein if said base station needs to move a channel resource, it sends an indication to the network (RNC), requesting the RNC to turn on power adjustment on all radio links connected to a mobile unit.

20. A data structure used in a computer generated instruction set for power adjustment method of claim 1, said data structure comprising a pilot field, first and second Dedicated Physical Data Channels (DPDCH) field, Transport Format Combination, and Indicator Transmit Power Control, second DPDCH field being arranged previous in to said pilot field, and wherein a downlink increase/decrease is applied before said pilot field.

21. The data structure of claim 20, wherein a sample is taken at said pilot field before an adjustment period subtracted with a pilot power offset during an adjustment period.

22. In a communications network, a base station (310, 610) comprising at least two hardware units (316a, 316b; 616a, 616b), a first and a second hardware unit, and a controller unit (330, 630), said base station being arranged to allow handover of recourses between said hardware units,
characterised in
that a controller unit is arrange to adjust power between said hardware units, said controller unit comprising a processor unit for configuring said resource, obtaining a sample of a power, transferring said power sample from said first hardware unit or predetermined source to said second hardware unit and means for controlling the power level on said second unit by a power value calculated with turned off output power on said second unit.

23. The base station of claim 22, wherein said network is WCDMA based network.

24. The base station of claim 23, being connected to Radio Network Controller.

25. The base station of claim 22, wherein said hardware units are transmitter units.

26. The base station of claim 23, wherein said resource is a channel resource.

27. The base station of claim 22, wherein said base station transmits into two cells in said network.

28. The base station of claim 22, wherein said handover is under addition of a new cell.

29. The base station of claim 22, further comprising a controller (320) for connecting and disconnecting outputs from said transmitter units to a base station output.

30. An arrangement in a communications network, the network having a base station (310, 610) comprising at least two hardware units (316a, 316b; 616a, 616b), a first and a second hardware unit, and a controller unit (330, 630), said base station being arranged to allow handover of recourses between said hardware units,
characterised in
that said arrangement, arranged to adjust power between said hardware units comprises a processor unit for configuring said resource, means for obtaining a sample of a power, means for transferring said power sample to said second hardware unit and means for controlling the power level on second unit by a power control value calculated with turned off output power on said second unit.

31. The arrangement of claim 30, wherein said hardware units are transmitter units.

32. The arrangement of claim 30, wherein said resource is a channel resource.

33. The arrangement of claim 30, further comprising means for connecting and disconnecting outputs from said transmitter units to a base station output.